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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MOLINARI, MICHAEL J

ART UNIT	PAPER NUMBER
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2665

DATE MAILED: 09/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/872,146

Applicant(s)

CHEN ET AL.

Examiner

Michael J Molinari

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 2,7 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 3-5, 6, 8-11, 13-32 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification discloses interface cards and discloses that the interface cards can receive two different types of traffic but fails to disclose how the two different types of traffic are received and processed differently. Pages 9-10 of the disclosure seem to suggest the same processing procedure for both TDM traffic and for packet traffic received from the line interface. It is not clear to what device "the same card" refers on page 9, paragraph 0027, line 4. Furthermore, the specification does not clearly describe the type of interface(s) or how it/they receive(s)/transmit(s) the two types of traffic differently. For these reasons the disclosure would not enable a person skilled in the art to make and/or use the invention.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3-5, 11, 13-20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surprenant et al. (U.S. Patent No. 6,266,341) in view of Brady (U.S. Patent No. 6,226,287).
5. Referring to claim 1, Surprenant et al. disclose a network switch (office communications system) comprising a backplane (TDM Bus), a plurality of interface cards coupled to the backplane via an interface (see Fig. 3), the interface cards coupled to receive multiple channels of network traffic from external sources (such as POTS, T-1/PRI, ATM, etc., see Fig. 3), the plurality of interface cards to receive one or more channels of data according to a TDM protocol (POTS or T-1/PRI) or one or more channels of data according to a second protocol (ATM), the interface cards to route the channels of data over the backplane to one or more predetermined interface cards (such as ATM card #82 to ATM controller card #79B in Fig. 3). However, Surprenant et al. differ from claim 1 in that they fail to disclose the use of multiple protocols on a single card. However, the use of multiple protocols on a single card is well known in the art. For example, Brady teaches the use of multiple protocols on a single card (see column 3, lines 50-56), which has the advantage of reducing cost. One skilled in the art would have recognized the advantage of using multiple protocols on a single card as taught by Brady. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of multiple protocols on a single interface card as taught by Brady into the office communications system of Surprenant et al. to achieve the advantage of reducing cost.

6. Referring to claim 3, Surprenant et al. disclose that the second protocol is a network traffic protocol. Specifically, they disclose that it is ATM, which is a network traffic protocol (see Fig. 3 and see column 8, lines 59-67 and column 9, lines 1-3).
7. Referring to claim 4, Surprenant et al. disclose that the second protocol is ATM (see Fig. 3 and see column 8, lines 59-67 and column 9, lines 1-3).
8. Referring to claim 5, Surprenant et al. fail to expressly disclose that the second protocol comprises Internet Protocol (IP). However, Surprenant et al. do disclose the use of "other WAN-type network services as determined by the particular office work environment" (see column 9, lines 1-3). IP is an extremely common WAN-type network service in many office work environments. A person with skill in the art would have recognized this. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of IP as a network traffic protocol in the office communications system of Surprenant et al. to achieve the advantage of making it compatible with a greater number of office work environments.
9. Referring to claim 11, Surprenant et al. disclose a method comprising receiving multiple channels of network traffic from external sources via a network interface (see Fig. 3, network interface not numbered) of an interface card (see Fig. 3, #82), wherein the multiple channels of network traffic to include one or more channels of data according to a time division multiplexed (TDM) protocol (such as POTS or T-1/PRI, see Fig. 3) or one or more channels of data according to a second protocol (such as ATM, see Fig. 3); and routing the channels of data via a backplane (TDM Bus, see Fig. 3) connection (see Fig. 3, backplane connection not numbered) to one or more predetermined destinations (see column 8, lines 59-67 and column 9, lines 1-3).

However, Surprenant et al. differ from claim 11 in that they fail to disclose the use of multiple protocols on a single card. However, the use of multiple protocols on a single card is well known in the art. For example, Brady teaches the use of multiple protocols on a single card (see column 3, lines 50-56), which has the advantage of reducing cost. One skilled in the art would have recognized the advantage of using multiple protocols on a single card as taught by Brady. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of multiple protocols on a single interface card as taught by Brady into the office communications system of Surprenant et al. to achieve the advantage of reducing cost.

10. Referring to claim 13, Surprenant et al. disclose that the second protocol is a network traffic protocol. Specifically, they disclose that it is ATM, which is a network traffic protocol (see Fig. 3 and see column 8, lines 59-67 and column 9, lines 1-3).

11. Referring to claim 14, Surprenant et al. disclose that the second protocol is ATM (see Fig. 3 and see column 8, lines 59-67 and column 9, lines 1-3).

12. Referring to claim 15, Surprenant et al. fail to expressly disclose that the second protocol comprises Internet Protocol (IP). However, Surprenant et al. do disclose the use of "other WAN-type network services as determined by the particular office work environment" (see column 9, lines 1-3). IP is an extremely common WAN-type network service in many office work environments. A person with skill in the art would have recognized this. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of IP as a network traffic protocol in the office communications system of

Surprenant et al. to achieve the advantage of making it compatible with a greater number of office work environments.

13. Referring to claim 16, Surprenant et al. disclose an apparatus (office communications system) comprising means for receiving multiple channels of network traffic from external sources via a network interface (see Fig. 3, network interface not numbered) of an interface card (see Fig. 3, #82), wherein the multiple channels of network traffic to include one or more channels of data according to a time division multiplexed (TDM) protocol (such as POTS or T-1/PRI, see Fig. 3) or one or more channels of data according to a second protocol (such as ATM, see Fig. 3); and means for routing the channels of data via a backplane (TDM Bus) connection (see Fig. 3, backplane connection not numbered) to one or more predetermined destinations (see column 8, lines 59-67 and column 9, lines 1-3). However, Surprenant et al. differ from claim 11 in that they fail to disclose the use of multiple protocols on a single card. However, the use of multiple protocols on a single card is well known in the art. For example, Brady teaches the use of multiple protocols on a single card (see column 3, lines 50-56), which has the advantage of reducing cost. One skilled in the art would have recognized the advantage of using multiple protocols on a single card as taught by Brady. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of multiple protocols on a single interface card as taught by Brady into the office communications system of Surprenant et al. to achieve the advantage of reducing cost.

14. Referring to claim 17, Surprenant et al. disclose that the second protocol is a network traffic protocol. Specifically, they disclose that it is ATM, which is a network traffic protocol (see Fig. 3 and see column 8, lines 59-67 and column 9, lines 1-3).

15. Referring to claim 18, Surprenant et al. disclose that the second protocol is ATM (see Fig. 3 and see column 8, lines 59-67 and column 9, lines 1-3).

16. Referring to claim 19, Surprenant et al. fail to expressly disclose that the second protocol comprises Internet Protocol (IP). However, Surprenant et al. do disclose the use of "other WAN-type network services as determined by the particular office work environment" (see column 9, lines 1-3). IP is an extremely common WAN-type network service in many office work environments. A person with skill in the art would have recognized this. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of IP as a network traffic protocol in the office communications system of Surprenant et al. to achieve the advantage of making it compatible with a greater number of office work environments.

17. Referring to claim 20, Surprenant et al. disclose that one or more of the interface cards receives electrical signals to communicate the network traffic (see column 5, line 64, and note that Ethernet ports receive electrical signals to communicate network traffic).

18. Referring to claim 23, Surprenant et al. disclose that one or more of the interface cards receives electrical signals to communicate the network traffic (see column 5, line 64, and note that Ethernet ports receive electrical signals to communicate network traffic).

19. Claims 6, 8-10, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surprenant et al. (U.S. Patent No. 6,266,341) in view of Brady (U.S. Patent No. 6,226,287), further in view of Degges et al. (U.S. Patent No. 5,953,329).

20. Referring to claim 6, Surprenant et al. disclose an interface card (see Fig. 3, #82) for use in a network switch (office communications system), the interface card comprising a backplane

interface (see Fig. 3, backplane interface is not numbered) to transmit and receive data over a backplane (TDM Bus, see Fig. 3); a network interface (see Fig. 3, network interface is not numbered) to transmit and receive multiple channels of network traffic from external sources, the multiple channels of network traffic to include one or more channels of data according to a time division multiplexed (TDM) protocol or one or more channels of data according to a second protocol. Surprenant et al. differ from claim 6 in that they fail to disclose the use of multiple protocols on a single card. However, the use of multiple protocols on a single card is well known in the art. For example, Brady teaches the use of multiple protocols on a single card (see column 3, lines 50-56), which has the advantage of reducing cost. One skilled in the art would have recognized the advantage of using multiple protocols on a single card as taught by Brady. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of multiple protocols on a single interface card as taught by Brady into the office communications system of Surprenant et al. to achieve the advantage of reducing cost. Surprenant et al. in view of Brady do not disclose the use of a time slot management circuit coupled between the backplane interface and the network interface, the time slot management circuit to route the channels of data over the backplane to one or more predetermined destinations. However, the use of time slot managers in TDM cards is well known in the art. For example, Degges et al. teach the use of a time slot manager on a T-1 card (see column 10, lines 20-30), which has the advantage of enabling the card to handle TDM traffic. One skilled in the art would have recognized the advantage of using a time slot manager in a TDM card as taught by Degges et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of a time slot

manager as taught by Degges et al. into the invention of Surprenant et al. in view of Brady to achieve the advantage of enabling the card to handle TDM traffic.

21. Referring to claim 8, Surprenant et al. disclose that the second protocol is a network traffic protocol. Specifically, they disclose that it is ATM, which is a network traffic protocol (see Fig. 3 and see column 8, lines 59-67 and column 9, lines 1-3).

22. Referring to claim 9, Surprenant et al. disclose that the second protocol is ATM (see Fig. 3 and see column 8, lines 59-67 and column 9, lines 1-3).

23. Referring to claim 10, Surprenant et al. fail to expressly disclose that the second protocol comprises Internet Protocol (IP). However, Surprenant et al. do disclose the use of "other WAN-type network services as determined by the particular office work environment" (see column 9, lines 1-3). IP is an extremely common WAN-type network service in many office work environments. A person with skill in the art would have recognized this. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of IP as a network traffic protocol in the office communications system of Surprenant et al. to achieve the advantage of making it compatible with a greater number of office work environments.

24. Referring to claim 26, Surprenant et al. disclose that the network interface (port) receives one or more channels of network traffic as electrical signals (see column 5, line 64, and note that Ethernet ports receive electrical signals to communicate network traffic).

25. Claims 21-22, 24-25, 29, and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surprenant et al. (U.S. Patent No. 6,266,341) in view of Brady (U.S. Patent No. 6,226,287), further in view of DeNap et al. (U.S. Patent No. 6,407,997).

26. Referring to claim 21, Surprenant et al. in view of Brady fail to disclose that one or more of the interface cards receives optical signals to communicate the network traffic. However, the use of optical signals to communicate network traffic is well known in the art. For example, DeNap et al. teach the use of ATM/SONET with OC-3 (optical) interfaces which has the advantage of providing high-speed ATM interfaces. One skilled in the art would have recognized the advantage of using ATM/SONET with OC-3 interfaces as taught by DeNap et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of ATM/SONET with OC-3 interfaces as taught by DeNap et al. into the office communications system of Surprenant et al. in view of Brady to achieve the advantage of providing high-speed ATM interfaces.

27. Referring to claim 22, Surprenant et al. in view of Brady fail to disclose that the optical signals comprise SONET-framed data. However, the use of optical signals comprising SONET-framed data to communicate network traffic is well known in the art. For example, DeNap et al. teach the use of ATM/SONET with OC-3 (optical) interfaces which has the advantage of providing high-speed ATM interfaces. One skilled in the art would have recognized the advantage of using ATM/SONET with OC-3 interfaces as taught by DeNap et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of ATM/SONET with OC-3 interfaces as taught by DeNap et al. into the office communications system of Surprenant et al. in view of Brady to achieve the advantage of providing high-speed ATM interfaces.

28. Referring to claim 24, Surprenant et al. in view of Brady fail to disclose that one or more of the predetermined interface cards transmits optical signals. However, the use of optical

signals to communicate network traffic is well known in the art. For example, DeNap et al. teach the use of ATM/SONET with OC-3 (optical) interfaces which has the advantage of providing high-speed ATM interfaces. One skilled in the art would have recognized the advantage of using ATM/SONET with OC-3 interfaces as taught by DeNap et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of ATM/SONET with OC-3 interfaces as taught by DeNap et al. into the office communications system of Surprenant et al. in view of Brady to achieve the advantage of providing high-speed ATM interfaces.

29. Referring to claim 25, Surprenant et al. in view of Brady fail to disclose that the optical signals comprise SONET-framed data. However, the use of optical signals comprising SONET-framed data to communicate network traffic is well known in the art. For example, DeNap et al. teach the use of ATM/SONET with OC-3 (optical) interfaces which has the advantage of providing high-speed ATM interfaces. One skilled in the art would have recognized the advantage of using ATM/SONET with OC-3 interfaces as taught by DeNap et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of ATM/SONET with OC-3 interfaces as taught by DeNap et al. into the office communications system of Surprenant et al. in view of Brady to achieve the advantage of providing high-speed ATM interfaces.

30. Referring to claim 29, Surprenant et al. in view of Brady teach the conversion of the received data to a TDM format for transmission over the backplane but fail to teach the conversion of the received data to an internal cell format for transmission over the backplane. However, conversion to an internal cell format for transmission over the backplane is well

known in the art. For example, DeNap et al. teach conversion of received data to an internal cell format for transmission over the backplane (see column 6, lines 43-56) to achieve the advantage of improving utilization of the backplane. One skilled in the art would have recognized the advantage of converting received data to an internal cell format for transmission over the backplane as taught by DeNap et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the conversion of received data into an internal cell format for transmission over the backplane as taught by DeNap et al. into the office communications system of Surprenant et al. in view of Brady to achieve the advantage of improving the utilization of the backplane.

31. Referring to claim 31, Surprenant et al. in view of Brady teach the conversion of data according to a TDM protocol and data according to a second protocol to a TDM format for transmission over the backplane but fail to teach the conversion of the received data to an internal cell format for transmission over the backplane. However, conversion to an internal cell format for transmission over the backplane is well known in the art. For example, DeNap et al. teach conversion of received data to an internal cell format for transmission over the backplane (see column 6, lines 43-56) to achieve the advantage of improving utilization of the backplane. One skilled in the art would have recognized the advantage of converting received data to an internal cell format for transmission over the backplane as taught by DeNap et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the conversion of received data into an internal cell format for transmission over the backplane as taught by DeNap et al. into the office communications system of Surprenant et al. in view of Brady to achieve the advantage of improving the utilization of the backplane.

32. Referring to claim 32, Surprenant et al. in view of Brady teach the conversion of data according to a TDM protocol and data according to a second protocol to a TDM format for transmission over the backplane but fail to teach the conversion of the received data to an internal cell format for transmission over the backplane. However, conversion to an internal cell format for transmission over the backplane is well known in the art. For example, DeNap et al. teach conversion of received data to an internal cell format for transmission over the backplane (see column 6, lines 43-56) to achieve the advantage of improving utilization of the backplane. One skilled in the art would have recognized the advantage of converting received data to an internal cell format for transmission over the backplane as taught by DeNap et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the conversion of received data into an internal cell format for transmission over the backplane as taught by DeNap et al. into the office communications system of Surprenant et al. in view of Brady to achieve the advantage of improving the utilization of the backplane.

33. Claims 27-28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Surprenant et al. (U.S. Patent No. 6,266,341) in view of Brady (U.S. Patent No. 6,226,287), further in view of Degges et al. (U.S. Patent No. 5,953,329), further in view of DeNap et al. (U.S. Patent No. 6,407,997).

34. Referring to claim 27, Surprenant et al. in view of Brady, further in view of Degges et al. fail to disclose that the network interface receives one or more channels of network traffic as optical signals. However, the use of optical signals to communicate network traffic is well known in the art. For example, DeNap et al. teach the use of ATM/SONET with OC-3 (optical) interfaces which has the advantage of providing high-speed ATM interfaces. One skilled in the

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art would have recognized the advantage of using ATM/SONET with OC-3 interfaces as taught by DeNap et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of ATM/SONET with OC-3 interfaces as taught by DeNap et al. into the office communications system of Surprenant et al. in view of Brady, further in view of Degges et al. to achieve the advantage of providing high-speed ATM interfaces.

35. Referring to claim 28, Surprenant et al. in view of Brady, further in view of Degges et al. fail to teach that the optical signals comprise SONET-framed data. However, the use of optical signals comprising SONET-framed data to communicate network traffic is well known in the art. For example, DeNap et al. teach the use of ATM/SONET with OC-3 (optical) interfaces which has the advantage of providing high-speed ATM interfaces. One skilled in the art would have recognized the advantage of using ATM/SONET with OC-3 interfaces as taught by DeNap et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of ATM/SONET with OC-3 interfaces as taught by DeNap et al. into the office communications system of Surprenant et al. in view of Brady, further in view of Degges et al. to achieve the advantage of providing high-speed ATM interfaces.

36. Referring to claim 30, Surprenant et al. in view of Brady, further in view of Degges et al. teach the conversion of the received data to a TDM format for transmission over the backplane but fail to teach the conversion of the received data to an internal cell format for transmission over the backplane. However, conversion to an internal cell format for transmission over the backplane is well known in the art. For example, DeNap et al. teach conversion of received data to an internal cell format for transmission over the backplane (see column 6, lines 43-56) to

achieve the advantage of improving utilization of the backplane. One skilled in the art would have recognized the advantage of converting received data to an internal cell format for transmission over the backplane as taught by DeNap et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the conversion of received data into an internal cell format for transmission over the backplane as taught by DeNap et al. into the office communications system of Surprenant et al. in view of Brady, further in view of Degges et al. to achieve the advantage of improving the utilization of the backplane.

Conclusion

37. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

38. U.S. Patent No. 6,259,699 to Opalka et al. teaches a network switch capable of handling a variety of network protocols and switching them over a common backplane by converting the different formats to a single internal cell format.

39. U.S. Patent No. 6,363,079 to Barzegar et al. teaches a network device capable of receiving TDM and network protocol interfaces with both electrical and optical interfaces.

40. U.S. Patent No. 5,345,445 to Hiller et al. teaches a network switching device with voice and data and electrical and optical interfaces that is capable of handling both TDM and packet data.

41. U.S. Patent No. 5,490,252 to Macera et al. teaches a network device capable of handling a variety of network interfaces including Ethernet, FDDI, T1/E1, and DS3.

42. U.S. Patent No. 6,332,198 to Simons et al. teaches a network switch with a plurality of universal port cards and a common backplane.

43. U.S. Patent No. 6,240,087 to Cummings et al. teaches a network device with optical interfaces that handles both TDM and packet data and switches them over a common backplane.

Response to Arguments

44. Applicant's arguments with respect to claims 1, 6, and 11 have been considered but are moot in view of the new ground(s) of rejection.

45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J Molinari whose telephone number is (703) 305-5742. The examiner can normally be reached on Monday-Friday 8am-4:30pm.

46. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9315 for After Final communications.

47. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

mjm

Michael Joseph Molinari
September 17, 2002



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600